ELSEVIER

Thin Solid Films 349 (1999) 304–305

thin solid films

Author Index of Volume 349

Addonizio, M.L., 93
Akita, K.-I., 115
Alvarez, A., 135
Alvarez, A., 212
Ambrico, M., 220
Anderle, M., 254
Antonaia, A., 93
Armand, F., 155
Arnautu, A., 29

Batalini, C., 238
Benedetti, A.V., 147
Bernabeu, E., 212
Berthier, C., 155
Bieringer, P., 135
Birch, J., 4
Bitsakis, J., 293
Brown, L.A., 230
Brown, N.M.D., 78
Budniok, A., 43
Burgos, M., 19

Cai, S., 120
Cantele, G., 93
Capozzi, V., 220
Chandorkar, A.N., 260
Chen, J., 225
Chen, X.M., 225
Cheng, D.J., 110
Cheng, H., 120
Cho, M.-H., 266
Cho, S.J., 266
Choe, Y.-S., 126
Choi, S.C., 266
Chung, J.-H., 126
Cobianu, C., 29
Coluzza, C., 254
Cozzi, S., 71
Craciun, G., 29
Craven, A.J., 176
Cricenti, A., 254

Da Cruz, F., 155
Dai, Z., 51
De Giovani, W.F., 238
Deki, S., 276
Deng, S.Z., 225
Driaf, K., 155
Duan, Z.J., 10

Eisele, I., 135

Feng, K.-A., 162
Fertonani, F.L., 147
Flueraru, C., 29
Fornander, H., 4
Fort, A.J., 212
Fotakis, C., 100
Fu, Y., 110
Fuenzalida, V., 135
Fujii, M., 289

Galesic, I., 14
Generosi, R., 254
Gierlotka, D., 43
Girasole, M., 254
Goto, K., 276
Grecu, R., 67
Gu, Y.S., 10
Guerrero, H., 212
Guszek, J., 186
Guszek, P., 186

Hansch, W., 135
Hao, Y., 120
Hashimoto, M., 270
Hatto, P., 176
Hayashi, H., 250
Hayashi, S., 289
Hayashi, T., 199
Hess, D.A., 230
Hinojosa, G., 171

Inata, M., 289
Indutnyi, I.Z., 298
Inoue, Y., 289
Itabashi, O., 250
Iwamura, E., 191

Jeong, K., 266
Jiang, B.Y., 110
Jiang, Y.-B., 162
Jung, D., 36

Kacsich, T., 1
Kaganovich, E.B., 298
Kajikawa, K., 244
Kamei, H., 270
Kanicki, J., 283
Khader, M.M., 165
Kher, J.A., 105
Kim, D.-S., 126
Kim, J., 56
Klini, A., 100
Knoll, W., 244
Ko, D.-H., 266
Kobayashi, K., 244
Kolbesen, B.O., 14
Kudryavtsev, A.A., 298
Kwong, D.L., 230

López.-Villegas, J.M., 293
Lameill, J.-M., 155
Lampert, C.M., 205
Langlet, M., 19
Li, T., 283
Li, W., 120
Ligonzo, T., 220
Lin, Z., 162
Liu, B. 110
Liu, Z.H., 78
Losiewicz, B., 43
Luches, A., 100
Luna, J., 135

Ma, J., 120
Ma, L.P., 10
MacKenzie, M., 176
Madhusudhana Reddy, M.H., 260
Manoilov, E.G., 298
Mao, A.Y., 230
Martil, I., 135
Martinez, F.L., 135
Martucci, C., 71
Marty, O., 61
Masalski, J., 186
Matsumuro, A., 199
Min, S.-K., 36
Mirenghi, L., 71
Miyashita, A., 51
Miyashita, T., 250
Mohler, C., 283
Morante, J.R., 293
Moriya, S., 270
Mugnier, J., 61
Murai, M., 270
Muramatsu, M., 199
Mutsukura, N., 115

Nanjo, H., 250
Naramoto, H., 51
Narumi, K., 51
Nicolet, M.-A., 1
Nishiwaki, T., 270
Nitsch, K., 186
Noguchi, T., 276

Ohnishi, T., 191
Oseguera, J., 171
Ozer, N., 205

Pagliara, S., 220
Pang, S.J., 10
Papadimitriou, D., 293
Parlog, C., 29
Paszti, F., 29
Patil, R.C., 105
Penza, M., 71
Perna, G., 220
Perrone, A., 100
Pethkar, S., 105
Pică, E.M., 67
Plenet, J.C., 61
Pop, I., 67
Popescu, V., 67
Portillo, J., 147
Privato, C., 93

Qian, P., 250

PII: S0040-6090(99)00311-9

Qiu, H., 270
Quirini, A., 71

Rella, R., 100, 254
Ro, J.-S., 130
Roberts, D.A., 230

Saleh, M.M., 165
Samitier, J., 293
Sanada, N., 250
Sandström, P., 4
Santos, J.P., 238
Sanz, F., 147
Sasabe, H., 244
Savaniu, C., 29
Sayo, K., 276
Schabes.-Retchkiman, P.S., 171
Serughetti, J., 61
Servat, J., 147
She, J.C., 225
Shimada, M., 270
Siciliano, P., 254
Son, K.-A., 230
Stępień, A., 43
Strass, A., 135
Suk Kim, Y., 36
Sumi, K., 270
Sundgren, J.-E., 4
Suzuki, T.M., 250
Svechnikov, S.V., 298

Tagliente, M.A., 71
Takagi, K., 191
Takahashi, Y., 199
Takei, K., 270
Tamura, S., 84
Tanigami, Y., 24
Terai, R., 24

Urlacher, C., 61

Van den Berg, A., 29
Vanzetti, L., 254
Vijayamohanan, K., 105
Vrtis, R.N., 230

Wakabayashi, H., 24
Wang, Y., 120
Whang, C. N., 266
Whangbo, S.W., 266
White, J.M., 230
Wu, X.F., 110

Xu, N.S., 225

Yamaguchi, K., 199
Yamamoto, K., 289
Yamamoto, S., 51
Yang, S.-Z., 110, 162
Yang, Y.Y., 225
Yokota, K., 84
Yokoyama, T., 250
Yoo, J., 56
Youm, D., 56
Yuan, L., 10

Zabrzeski, J., 186
Zaharescu, M., 29
Zaniquelli, M.E.D., 238
Zergioti, I., 100
Zhang, H.-X., 162
Zhang, Z., 24
Zheng, X.G., 225
Zocco, A., 100

ELSEVIER

Thin Solid Films 349 (1999) 306–311

thin solid films

Subject Index of Volume 349

Adsorption
Ellipsometric characterization and influence of relative humidity on TiO_2 layers optical properties, 212
Air/water interface
Monomolecular layer formation of amphiphilic cyclodextrin derivatives at the air/water interface, 244
Al_2O_3/AlN/Al
Alumina, aluminium nitride and aluminium composite coating on 0.45% C steel by using a plasma source ion implantation and deposition (PSII&D) system, 110
Aluminium oxide
Improvement in corrosion resistance of the 316l stainless steel by means of Al_2O_3 coatings deposited by the sol-gel method, 186
Ammonia
Enhancement of polymerization in $CH_3SiO_{3/2}$ coating film by gaseous amines, 24
Amorphous materials
Moving species in $Ti_{34}Si_{23}N_{43}$ oxidation, 1
Composite layers in an Ni–P system containing TiO_2 and PTFE, 43
Infrared absorption spectroscopy measurements of amorphous CN_x films prepared in CH_4/N_2 r.f. discharge, 115
Annealing
Annealing ultra thin Ta_2O_5 films deposited on bare and nitrogen passivated Si(100), 230
Anodic oxidation
Effect of aluminium oxide caps on hillock formation in aluminium alloy films, 191
Atomic and molecular studies
Fabrication and characterisation of thin low-temperature MBE-compatible silicon oxides of different stoichiometry, 135
Atomic force microscopy
Direct observation of the polymer and monomer Langmuir–Blodgett films with the atomic force microscope, 250

Biaxial texture
Textures of CeO_2 films grown on biaxially textured $Pt_{0.7}Pd_{0.3}$ substrates, 56
Buried layer
A study of buried layer formation using MeV ion implantation for the fabrication of ULSI CMOS devices, 130

CaCuB thin films
Preparation and characterization of the $[CaCu(bet)^4](ClO_4)_4$ thin films, 225
Cadmium selenide
Optical characterization of CdS_xSe_{1-x} films grown on quartz substrate by pulsed laser ablation technique, 220
Cadmium sulphide
Optical properties of cadmium sulfide thin films, chemically deposited from baths containing surfactants, 67
Deposition and characterization of CdS nanoparticle/polyaniline composite films, 105
Optical characterization of CdS_xSe_{1-x} films grown on quartz substrate by pulsed laser ablation technique, 220
Carbon nitride
Scanning tunneling microscopy investigation of carbon nitride thin films grown by microwave plasma chemical vapor deposition, 10
0.45% C steel
Alumina, aluminium nitride and aluminium composite coating on 0.45% C steel by using a plasma source ion implantation and deposition (PSII&D) system, 110
Catalysis and Schottky barrier
Comparative study between the photoelectrochemical behaviors of metal-loaded n- and p-GaAs, 162
CeO_2 film
Textures of CeO_2 films grown on biaxially textured $Pt_{0.7}Pd_{0.3}$ substrates, 56
Clusters
Deposition and characterization of CdS nanoparticle/polyaniline composite films, 105
Structural transition of crystalline Y_2O_3 film on Si(111) with substrate temperature, 266
Coated conductors
Textures of CeO_2 films grown on biaxially textured $Pt_{0.7}Pd_{0.3}$ substrates, 56
Coatings
The sol-gel transformation of TIPT coatings: a FTIR study, 19
Enhancement of polymerization in $CH_3SiO_{3/2}$ coating film by gaseous amines, 24
Optical properties of cadmium sulfide thin films, chemically deposited from baths containing surfactants, 67
Deposition and characterization of CdS nanoparticle/polyaniline composite films, 105
Erosion and deposition during the sputter cleaning of substrates prior to the cathodic arc evaporation of transition metal nitride coatings, 176
Improvement in corrosion resistance of the 316l stainless steel by means of Al_2O_3 coatings deposited by the sol-gel method, 186
Composite
Composite films produced by successive vapor-depositions of nylon-11 and porphyrin compounds, 276
Copper films
Effects of N_2 plasma treatment of titanium nitride/borophosphosilicate glass patterned substrates on metal organic chemical vapor deposition of copper, 36

PII: S0040-6090(99)000312-0

Corrosion
Alumina, aluminium nitride and aluminium composite coating on 0.45% C steel by using a plasma source ion implantation and deposition (PSII&D) system, 110
Improvement in corrosion resistance of the 316l stainless steel by means of Al_2O_3 coatings deposited by the sol-gel method, 186
Crystallization
Structural transition of crystalline Y_2O_3 film on Si(111) with substrate temperature, 266
Cyclodextrin derivatives
Monomolecular layer formation of amphiphilic cyclodextrin derivatives at the air/water interface, 244

Deposition
Preparation and characterization of the $[CaCu(bet)^4](ClO_4)_4$ thin films, 225
Deposition process
Deposition and characterization of CdS nanoparticle/polyaniline composite films, 105
Fabrication and characterisation of thin low-temperature MBE-compatible silicon oxides of different stoichiometry, 135
Depth profiling
Depth dependence of stress and porosity in porous silicon: a micro-Raman study, 293
Diamond thin films
Diamond growth on steel substrates with AL–N interlayer produced by high power plasma streams, 155
Dielectrics
Annealing ultra thin Ta_2O_5 films deposited on bare and nitrogen passivated Si(100), 230
Dynamic ion mixing technique
Synthesis of Ti-N thin films prepared by dynamic ion mixing technique and their mechanical properties, 199

Electrical properties and measurements
Transport mechanisms of RF sputtered Al-doped ZnO films by H_2 process gas dilution, 93
Single-electron tunneling in thin metal granular films, 289
Electrochemistry
Composite layers in an Ni–P system containing TiO_2 and PTFE, 43
Electrochromic performance of sol-gel deposited WO_3–V_2O_5 films, 205
Electrochromism
Electrochromic performance of sol-gel deposited WO_3–V_2O_5 films, 205
Electron-beam evaporation
Structure evolution of epitaxial Pd grown on MgO(001): a comparison between sputtering and electron-beam evaporation, 4
Ellipsometry
Ellipsometric characterization and influence of relative humidity on TiO_2 layers optical properties, 212
Epitaxy
Structure evolution of epitaxial Pd grown on MgO(001): a comparison between sputtering and electron-beam evaporation, 4

$FeTiO_3$
Control of film orientation: a parametric study of laser ablated FTO films on *a*-, *c*- and *r*-cut sapphire substrates by X-ray diffraction, 51
Fine particles
Composite films produced by successive vapor-depositions of nylon-11 and porphyrin compounds, 276
Fluorescence
Preparation and characterization of the $[CaCu(bet)^4](ClO_4)_4$ thin films, 225
Fourier transform infrared spectroscopy
Method of collecting pure vibrational absorption spectra of amorphous thin films, 283

Gallium arsenide
Heteroepitaxial growth of GaAs films on Si substrates using ion beams, neutral molecular beams, and their mixtures, 84
Comparative study between the photoelectrochemical behaviors of metal-loaded n- and p-GaAs, 162
Gas sensors
E-beam deposited SnO_2, Pt–SnO_2 and Pd–SnO_2 thin films for LPG detection, 260
Gettering
A study of buried layer formation using MeV ion implantation for the fabrication of ULSI CMOS devices, 130
Gold films on mica
Scanning tunnelling microscopy characterization of gold film surfaces processed using an argon radio frequency (RF) plasma, 78

Hall effect
Transport mechanisms of RF sputtered Al-doped ZnO films by H_2 process gas dilution, 93
Hardness
Synthesis of Ti-N thin films prepared by dynamic ion mixing technique and their mechanical properties, 199
Heteroepitaxial growth
Heteroepitaxial growth of GaAs films on Si substrates using ion beams, neutral molecular beams, and their mixtures, 84
High resolution electron microscopy
Phase identification during aging of some nitrided ferrous materials, 171
High T_c superconductors
Textures of CeO_2 films grown on biaxially textured $Pt_{0.7}Pd_{0.3}$ substrates, 56

Implantation induced defect
A study of buried layer formation using MeV ion implantation for the fabrication of ULSI CMOS devices, 130
Inclined substrates
Textures of CeO_2 films grown on biaxially textured $Pt_{0.7}Pd_{0.3}$ substrates, 56
Indium tin oxide films
Characterization of transparent and conductive electrodes of indium tin oxide thin films by sequential reactive evaporation, 71
Infrared spectroscopy
The sol-gel transformation of TIPT coatings: a FTIR study, 19
Enhancement of polymerization in $CH_3SiO_{3/2}$ coating film by gaseous amines, 24
Optical characterisation of CN_x thin films deposited by reactive pulsed laser ablation, 100

Infrared absorption spectroscopy measurements of amorphous CN_x films prepared in CH_4/N_2 r.f. discharge, 115
Interfaces
Erosion and deposition during the sputter cleaning of substrates prior to the cathodic arc evaporation of transition metal nitride coatings, 176
Ion beams
Heteroepitaxial growth of GaAs films on Si substrates using ion beams, neutral molecular beams, and their mixtures, 84
Iron nitride phases
Phase identification during aging of some nitrided ferrous materials, 171
π–A isotherms
Monomolecular layer formation of amphiphilic cyclodextrin derivatives at the air/water interface, 244

Langmuir–Blodgett films
Palmitic acid and aquo-ruthenium complex monolayers at the liquid–air interface and electroactive Langmuir–Blodgett films, 238
Direct observation of the polymer and monomer Langmuir–Blodgett films with the atomic force microscope, 250
Laser ablation
Optical characterisation of CN_x thin films deposited by reactive pulsed laser ablation, 100
Optical characterization of CdS_xSe_{1-x} films grown on quartz substrate by pulsed laser ablation technique, 220
Optical properties of Si nanocomposite films prepared by laser ablation, 298
Laser energy density
Control of film orientation: a parametric study of laser ablated FTO films on *a*-, *c*- and *r*-cut sapphire substrates by X-ray diffraction, 51
Leakage current
A study of buried layer formation using MeV ion implantation for the fabrication of ULSI CMOS devices, 130
Liquefied petroleum gas detection
E-beam deposited SnO_2, Pt–SnO_2 and Pd–SnO_2 thin films for LPG detection, 260
Liquid monolayers
Palmitic acid and aquo-ruthenium complex monolayers at the liquid–air interface and electroactive Langmuir–Blodgett films, 238

Magnesium oxide
Structure evolution of epitaxial Pd grown on MgO(001): a comparison between sputtering and electron-beam evaporation, 4
Mercury
Electrodeposited thin mercury films on Pt–Ir alloy electrodes, 147
Metal granular films
Single-electron tunneling in thin metal granular films, 289
Metal oxides
E-beam deposited SnO_2, Pt–SnO_2 and Pd–SnO_2 thin films for LPG detection, 260
Metal-ion-doped TiO_2 nanoparticles
Photoelectrochemical properties of metal-ion-doped TiO_2 nanocrystalline electrodes, 120
Metallization
Effects of N_2 plasma treatment of titanium nitride/borophosphosilicate glass patterned substrates on metal organic chemical vapor deposition of copper, 36
Comparative study between the photoelectrochemical behaviors of metal-loaded n- and p-GaAs, 162
Effect of aluminium oxide caps on hillock formation in aluminium alloy films, 191
MeV ion implantation
A study of buried layer formation using MeV ion implantation for the fabrication of ULSI CMOS devices, 130
Microwave nitriding
Phase identification during aging of some nitrided ferrous materials, 171
Molecular dispersion
Composite films produced by successive vapor-depositions of nylon-11 and porphyrin compounds, 276
Monolayers
Study of a self-assembled porphyrin monomolecular layer obtained by metal complexation, 147
Monomolecular layer formation of amphiphilic cyclodextrin derivatives at the air/water interface, 244

N_2 plasma
Effects of N_2 plasma treatment of titanium nitride/borophosphosilicate glass patterned substrates on metal organic chemical vapor deposition of copper, 36
Nanocrystalline electrode
Photoelectrochemical properties of metal-ion-doped TiO_2 nanocrystalline electrodes, 120
Nanostructures
Structural and microstructural analyses of sol-gel lead titanate optical planar waveguides, 61
Single-electron tunneling in thin metal granular films, 289
Optical properties of Si nanocomposite films prepared by laser ablation, 298
Nitrides
Moving species in $Ti_{34}Si_{23}N_{43}$ oxidation, 1
Formation of vanadium nitride by rapid thermal processing, 14
Optical characterisation of CN_x thin films deposited by reactive pulsed laser ablation, 100
Infrared absorption spectroscopy measurements of amorphous CN_x films prepared in CH_4/N_2 r.f. discharge, 115
Synthesis of Ti-N thin films prepared by dynamic ion mixing technique and their mechanical properties, 199
Nitrogen
Formation of vanadium nitride by rapid thermal processing, 14

Optical and electrical characteristics
Effect of low energy oxygen ion beam on optical and electrical characteristics of dual ion beam sputtered SnO_2 thin films, 126
Optical and electrical properties
Preparation and characterization of the $[CaCu(bet)^4](ClO_4)_4$ thin films, 225
Optical properties
Structural and microstructural analyses of sol-gel lead titanate optical planar waveguides, 61
Optical properties of cadmium sulfide thin films, chemically deposited from baths containing surfactants, 67
Optical characterisation of CN_x thin films deposited by reactive pulsed laser ablation, 100

Ellipsometric characterization and influence of relative humidity on TiO_2 layers optical properties, 212
Optical characterization of CdS_xSe_{1-x} films grown on quartz substrate by pulsed laser ablation technique, 220
Method of collecting pure vibrational absorption spectra of amorphous thin films, 283
Optical properties of Si nanocomposite films prepared by laser ablation, 298
Orientation
Control of film orientation: a parametric study of laser ablated FTO films on *a*-, *c*- and *r*-cut sapphire substrates by X-ray diffraction, 51
Oxidation
Moving species in $Ti_{34}Si_{23}N_{43}$ oxidation, 1
Oxides
Structural and microstructural analyses of sol-gel lead titanate optical planar waveguides, 61
Oxygen ion beam
Effect of low energy oxygen ion beam on optical and electrical characteristics of dual ion beam sputtered SnO_2 thin films, 126

p–n conversion
Photoelectrochemical properties of metal-ion-doped TiO_2 nanocrystalline electrodes, 120
Palladium
Structure evolution of epitaxial Pd grown on MgO(001): a comparison between sputtering and electron-beam evaporation, 4
E-beam deposited SnO_2, Pt–SnO_2 and Pd–SnO_2 thin films for LPG detection, 260
Phase
Synthesis of Ti-N thin films prepared by dynamic ion mixing technique and their mechanical properties, 199
Physical vapour deposition
Erosion and deposition during the sputter cleaning of substrates prior to the cathodic arc evaporation of transition metal nitride coatings, 176
Piezoelectric effect
Structural, compositional and piezoelectric properties of the sol-gel $Pb(Zr_{0.56}Ti_{0.44})_{0.80}(Mg_{1/3}Nb_{2/3})_{0.20}O_3/Pb(Zr_{0.56}Ti_{0.44})O_3$ composite films, 270
Plasma processing
Scanning tunnelling microscopy characterization of gold film surfaces processed using an argon radio frequency (RF) plasma, 78
Plasma processing and deposition
Infrared absorption spectroscopy measurements of amorphous CN_x films prepared in CH_4/N_2 r.f. discharge, 115
Fabrication and characterisation of thin low-temperature MBE-compatible silicon oxides of different stoichiometry, 135
PSII&D
Alumina, aluminium nitride and aluminium composite coating on 0.45% C steel by using a plasma source ion implantation and deposition (PSII&D) system, 110
Platinum
Electrodeposited thin mercury films on Pt–Ir alloy electrodes, 147
PLD
Control of film orientation: a parametric study of laser ablated FTO films on *a*-, *c*- and *r*-cut sapphire substrates by X-ray diffraction, 51
Porous silicon
Tin dioxide sol-gel derived films doped with platinum and antimony deposited on porous silicon, 29
Depth dependence of stress and porosity in porous silicon: a micro-Raman study, 293
Porphyrin
Study of a self-assembled porphyrin monomolecular layer obtained by metal complexation, 147
Composite films produced by successive vapor-depositions of nylon-11 and porphyrin compounds, 276
Pt and Sb additives
Tin dioxide sol-gel derived films doped with platinum and antimony deposited on porous silicon, 29
Pt–Pd tape
Textures of CeO_2 films grown on biaxially textured $Pt_{0.7}Pd_{0.3}$ substrates, 56

RABiTS
Textures of CeO_2 films grown on biaxially textured $Pt_{0.7}Pd_{0.3}$ substrates, 56
Raman scattering
Structural and microstructural analyses of sol-gel lead titanate optical planar waveguides, 61
Depth dependence of stress and porosity in porous silicon: a micro-Raman study, 293
Rapid thermal processing
Formation of vanadium nitride by rapid thermal processing, 14
Ruthenium complexes
Palmitic acid and aquo-ruthenium complex monolayers at the liquid–air interface and electroactive Langmuir–Blodgett films, 238

Scanning electron microscopy
Scanning tunneling microscopy investigation of carbon nitride thin films grown by microwave plasma chemical vapor deposition, 10
Diamond growth on steel substrates with AL–N interlayer produced by high power plasma streams, 155
Scanning tunnelling microscopy
Scanning tunnelling microscopy characterization of gold film surfaces processed using an argon radio frequency (RF) plasma, 78
Secondary ion mass spectrometry (SIMS)
Annealing ultra thin Ta_2O_5 films deposited on bare and nitrogen passivated Si(100), 230
Structural, compositional and piezoelectric properties of the sol-gel $Pb(Zr_{0.56}Ti_{0.44})_{0.80}(Mg_{1/3}Nb_{2/3})_{0.20}O_3/Pb(Zr_{0.56}Ti_{0.44})O_3$ composite films, 270
Selective chemical vapor deposition
Effects of N_2 plasma treatment of titanium nitride/borophosphosilicate glass patterned substrates on metal organic chemical vapor deposition of copper, 36
Self assembly
Study of a self-assembled porphyrin monomolecular layer obtained by metal complexation, 147
Sensors
A study of physical properties and gas-surface interaction of vanadium oxide thin films, 254

Sequential reactive evaporation
Characterization of transparent and conductive electrodes of indium tin oxide thin films by sequential reactive evaporation, 71
Silicides
Moving species in $Ti_{34}Si_{23}N_{43}$ oxidation, 1
Enhancement of polymerization in $CH_3SiO_{3/2}$ coating film by gaseous amines, 24
Silicon
Method of collecting pure vibrational absorption spectra of amorphous thin films, 283
Optical properties of Si nanocomposite films prepared by laser ablation, 298
Silicon nitride
Method of collecting pure vibrational absorption spectra of amorphous thin films, 283
Silicon oxide
Fabrication and characterisation of thin low-temperature MBE-compatible silicon oxides of different stoichiometry, 135
Single-electron tunnelling
Single-electron tunneling in thin metal granular films, 289
SnO_2
E-beam deposited SnO_2, Pt–SnO_2 and Pd–SnO_2 thin films for LPG detection, 260
SnO_2 thin films
Tin dioxide sol-gel derived films doped with platinum and antimony deposited on porous silicon, 29
Effect of low energy oxygen ion beam on optical and electrical characteristics of dual ion beam sputtered SnO_2 thin films, 126
Sol-gel
Tin dioxide sol-gel derived films doped with platinum and antimony deposited on porous silicon, 29
Improvement in corrosion resistance of the 316l stainless steel by means of Al_2O_3 coatings deposited by the sol-gel method, 186
Electrochromic performance of sol-gel deposited WO_3–V_2O_5 films, 205
Sputtering
Structure evolution of epitaxial Pd grown on MgO(001): a comparison between sputtering and electron-beam evaporation, 4
Transport mechanisms of RF sputtered Al-doped ZnO films by H_2 process gas dilution, 93
A study of physical properties and gas-surface interaction of vanadium oxide thin films, 254
Stainless steel
Improvement in corrosion resistance of the 316l stainless steel by means of Al_2O_3 coatings deposited by the sol-gel method, 186
Sticking coefficients
Heteroepitaxial growth of GaAs films on Si substrates using ion beams, neutral molecular beams, and their mixtures, 84
Stress
Effect of aluminium oxide caps on hillock formation in aluminium alloy films, 191
Depth dependence of stress and porosity in porous silicon: a micro-Raman study, 293
Structural properties
Structural, compositional and piezoelectric properties of the sol-gel $Pb(Zr_{0.56}Ti_{0.44})_{0.80}(Mg_{1/3}Nb_{2/3})_{0.20}O_3/Pb(Zr_{0.56}Ti_{0.44})O_3$ composite films, 270
Structure
Structure evolution of epitaxial Pd grown on MgO(001): a comparison between sputtering and electron-beam evaporation, 4
Scanning tunneling microscopy investigation of carbon nitride thin films grown by microwave plasma chemical vapor deposition, 10
Sulphides
Optical properties of cadmium sulfide thin films, chemically deposited from baths containing surfactants, 67
Surface and interface states
Effect of aluminium oxide caps on hillock formation in aluminium alloy films, 191
Surface composition
Electrodeposited thin mercury films on Pt–Ir alloy electrodes, 147
A study of physical properties and gas-surface interaction of vanadium oxide thin films, 254
Surface modification
Scanning tunnelling microscopy characterization of gold film surfaces processed using an argon radio frequency (RF) plasma, 78

Titanium
Synthesis of Ti-N thin films prepared by dynamic ion mixing technique and their mechanical properties, 199
Titanium oxide
The sol-gel transformation of TIPT coatings: a FTIR study, 19
Composite layers in an Ni–P system containing TiO_2 and PTFE, 43
Ellipsometric characterization and influence of relative humidity on TiO_2 layers optical properties, 212
Transmission electron microscopy
Erosion and deposition during the sputter cleaning of substrates prior to the cathodic arc evaporation of transition metal nitride coatings, 176
Structural, compositional and piezoelectric properties of the sol-gel $Pb(Zr_{0.56}Ti_{0.44})_{0.80}(Mg_{1/3}Nb_{2/3})_{0.20}O_3/Pb(Zr_{0.56}Ti_{0.44})O_3$ composite films, 270
Transparent and conductive electrodes
Characterization of transparent and conductive electrodes of indium tin oxide thin films by sequential reactive evaporation, 71

V_2O_5
Electrochromic performance of sol-gel deposited WO_3–V_2O_5 films, 205
Vanadium
Formation of vanadium nitride by rapid thermal processing, 14
Vanadium oxide
A study of physical properties and gas-surface interaction of vanadium oxide thin films, 254
Vapor-deposition
Composite films produced by successive vapor-depositions of nylon-11 and porphyrin compounds, 276

WO_3
Electrochromic performance of sol-gel deposited WO_3–V_2O_5 films, 205

X-ray diffraction
Composite layers in an Ni–P system containing TiO_2 and PTFE, 43
X-ray photoelectron spectroscopy (XPS)
Diamond growth on steel substrates with AL–N interlayer produced by high power plasma streams, 155
Study of a self-assembled porphyrin monomolecular layer obtained by metal complexation, 147
Annealing ultra thin Ta_2O_5 films deposited on bare and nitrogen passivated Si(100), 230

Zinc oxide
Transport mechanisms of RF sputtered Al-doped ZnO films by H_2 process gas dilution, 93